# WSR-88D Status And Plans

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National Weather Service
Family Of Services Meeting
Seattle, WA







## Overview



- Level II Data Status And Plans
- NWS Level II Network Architecture
- NEXRAD Program Plans Impacting External Users
  - Radar Product Generator Build 5
  - Radar Data Acquisition
- Additional Information
- Wrap Up



#### Level II Data Status And Plans



- NWS Will Have 121 NWS And 3 DOD Sites On "CRAFT"/NWS Network (Initial Operating Capability) By End Of February 2004
  - 102 Sites On Line As Of 1/15/04
  - Network A Mixture Of
    - CRAFT Communications And NWS Network
    - Assorted LDM/Compression Hardware Platforms
  - NWS Server At Univ. Of Maryland In Place
  - Data Receipt Reliability And Time Latency Exceeding NWS Requirements



## Level II Data Status And Plans



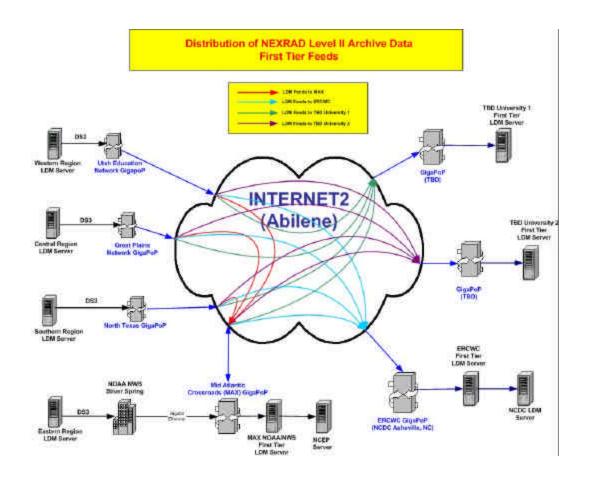
(Continued)

- NWS Will Announce Initial Options For Distributing Level II Data To Universities And Private Sector By End Of February
  - NWS Used Inputs From June 2003 Public Meeting And Follow-Up Comments
  - Private Sector Able to Choose The Preferred Option, Or Develop Other Arrangements
  - NWS Welcomes Comments And Questions On The Initial Distribution Plans
    - Discuss At This Meeting
    - Send Email To <u>Tim.D.Crum@noaa.gov</u>

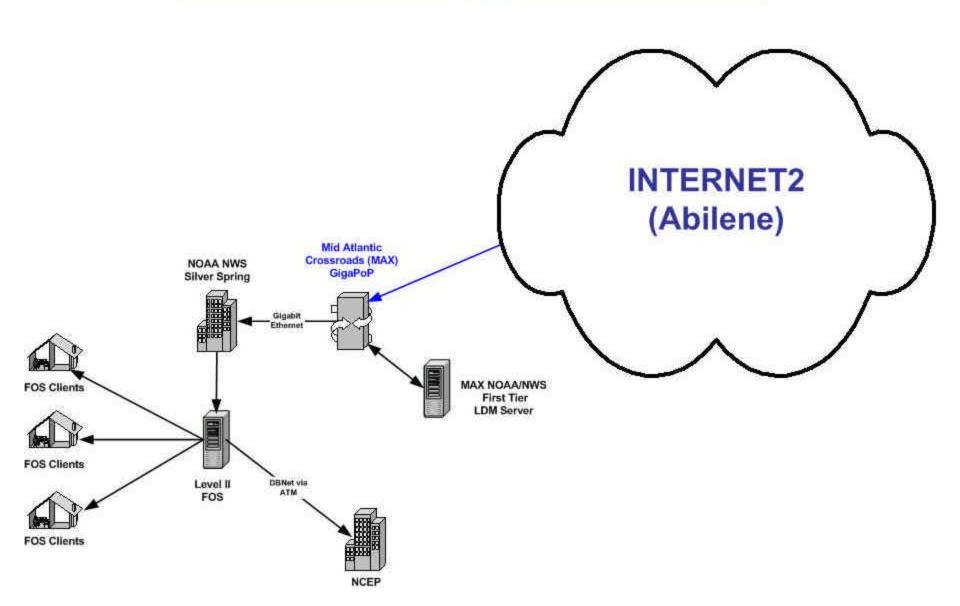


## NWS Level II Network Architecture





#### Distribution of NEXRAD Level II Archive Data MAX / NCEP with FOS 12/09/03





# NEXRAD Program Plans Impacting External Users



- Radar Product Generator (RPG) Build 5
  - Beta Test At 7 Sites Begins Mid February 04, Field Release Begins 3/29/04
  - Major Changes
    - Two New Volume Coverage Patterns (VCPs)
      - VCP12
        - » 4.1 Minute, 17 Scans, 14 Elevation Angles
        - » Improved Storm Detection And Tracking
        - » Improved Vertical Resolution Of Storms
      - VCP121
        - » Same Angles As VCP21, But 20 Scans Vice VCP21's 11 Scans And 5 Min. Vice VCP21's 6 Min.
        - » Provides Improved Velocity Dealiasing/Reduction Of "Purple Haze"



# NEXRAD Program Plans Impacting External Users



(Continued)

- Level II
  - Add Metadata To Data Stream
  - Software & Hardware To Enable Addition Of BDDS At Remaining 7 DOD Sites For FOC As Originally Planned
  - Software To Move LDM & Compression To BDDS
    - » Removes PCs
    - » Transition All Communications To NWS Network
    - » Completes NWS Architecture
- New Precipitation Algorithm (EPRE)
  - Required For New VCPs And New Science For Precipitation Estimation
  - Users May See Different Patterns Of Anomalous
     Precipitation And Effects Of Exclusion Zones



# NEXRAD Program Plans Impacting External Users



(Continued)

- Radar Data Acquisition (RDA)
  - NEXRAD Program To Implement Open RDA (ORDA)
    - Beta Test Beginning In September 2004
    - Deployment September 2004 December 2005
  - ORDA Impacts Noticeable To External Users, Initial Deployment
    - Improved Data Quality
  - ORDA Enables New Science Possibilities Such As:
    - 0.25 km Reflectivity
    - 0.5 Degree Azimuthal Sampling
    - Additional Data Quality Improvements
    - Dual Polarization (Phase 1 Approved In November 2003)



## Additional Information



- NWS And DOD Have Agreed To Install BDDS At All CONUS DOD WSR-88D Systems
  - Hardware And Software To Be Installed In Last 10 DOD WSR-88Ds In CONUS By March 2005
- No Plans For OCONUS Connections At This Time
- FMH-11 Being Updated
  - Part A Updated June 2003, Target March 2004 For Next Update
  - Parts C And D Update In Progress, Target Early 2005 Publication
  - Part B Update To Start Later In Year, Target Spring 2005
     Publication
  - Plan To Post Final Copies On Web
  - Plan To Update With Each Software Release (6-Month Build Cycle)



#### Additional Information



- URLs For Additional Information
  - ORDA: http://www.orda.roc.noaa.gov/
  - RPG Build 5: <a href="http://www.nws.noaa.gov/tg/rpccds.html">http://www.nws.noaa.gov/tg/rpccds.html</a>
  - Level II Program Information: http://www.roc.noaa.gov/NWS\_Level\_2/
  - Contact Tim Crum (<u>Tim.D.Crum@noaa.gov</u>) For RPG Build 5
     Sample Level II Data Streams And Interface Control
     Documentation



## Wrap Up



• Comments, Questions, And Suggestions